All Public Doctoral Institutions

(Carnegie Basic Classification 2010) Number of 2016 CDS participants: 127 In the summer of 2016, 3,500 institutions were invited to contribute data to the EDUCAUSE Core Data Service (CDS). This almanac summarizes data from a subset of responding institutions. Some publicly available data from the Integrated Postsecondary Education Data System (IPEDS, nces.ed.gov/ipeds/) are used in calculating metrics. Reported statistics are either an estimated proportion of the population or an estimated median (rather than a mean). CDS participants can access data at www.educause.edu/coredata; non-participants can access other CDS resources at this site.

CENTRAL IT FUNDING

- 47% Ongoing base funds available as a percentage of total central IT funds available at institutions reporting any ongoing base funds available
- 12% Student technology fee funds available as a percentage of total central IT funds available at institutions reporting any student technology fee funds available
- 4% Compensation paid from another source as a percentage of total central IT funds available at institutions reporting any compensation paid from another source
- 19% Fee-based/cost-recovery funds available as a percentage of total central IT funds available at institutions reporting any fee-based/cost-recovery funds available
- 4% One-time funds available as a percentage of total central IT funds available at institutions reporting any one-time funds available
- 10% Carryover funds available as a percentage of total central IT funds available at institutions reporting any carryover funds available
- 80% Institutions with a designated student technology fee
- \$ 267 Student technology fee revenue generated for the entire institution per student FTE
 - 59% Percentage of student technology fee funds allocated to central IT out of total student technology fee revenue generated for the institution

CENTRAL IT SPENDING

- \$ 955 Total central IT spending per institutional FTE (students, faculty, and staff)
- \$ 5,368 Total central IT spending per institutional employee FTE (faculty and staff)
- \$ 1,170 Total central IT spending per student FTE
- \$ 1,212 Central IT spending on professional development per central IT staff FTE
 - 3.1% Total central IT spending as a percentage of institutional expenses
 - 47% $\,$ Percentage of institutions with a 5% or greater \emph{increase} in total central IT spending
 - 30% Percentage of institutions with a 5% or greater decrease in total central IT spending

Central IT spending by type (as a percentage of total central IT spending):

- 53% Ongoing compensation
- 0% Fixed-term labor
- 1% Professional development
- 34% In-house infrastructure and services
- 4% External providers

Central IT spending by domain (as a percentage of total central IT spending):

- 8% Administration and management of IT
- 13% Support services
- 9% Educational technology services
- 2% Research computing services
- 19% Communications infrastructure services
- 16% Enterprise infrastructure and services
- 4% Information security
- 17% Information systems and applications
- 80% Percentage of total central IT spending on running the institution
- 10% Percentage of total central IT spending on growing the institution
- 5% Percentage of total central IT spending on transforming the institution

CENTRAL IT STAFFING

- 57% Institutions whose highest-ranking IT officer is on presidential cabinet
- 3.2% Central IT staff FTEs as a percentage of institutional employee FTEs
- 19% Student worker FTEs as a percentage of total central IT FTEs
- 7.4 Central IT FTEs per 1,000 institutional FTEs
- 0.5 Central IT administration and management of IT FTEs per 1,000 institutional FTEs
- 1.5 Central IT support services FTEs per 1,000 institutional FTEs
- 0.9 Central IT educational technology services FTEs per 1,000 institutional FTEs
- 0.1 Central IT research computing services FTEs per 1,000 institutional FTEs
- 0.9 Central IT communications infrastructure services FTEs per 1,000 institutional FTEs
- 1.1 Central IT enterprise infrastructure and services FTEs per 1,000 institutional FTEs
- 0.3 Central IT information security FTEs per 1,000 institutional FTEs
- 1.2 Central IT information systems and applications FTEs per 1,000 institutional FTEs

DISTRIBUTED IT

- 69% Percentage of institutions with less than 75% centralization of IT expenditures
- \$ 1,161 Distributed IT spending per institutional FTE at institutions with less than 75% centralization of IT expenditures
 - 46% Distributed IT spending as a percentage of total institutional IT expenditures at institutions with less than 75% centralization of IT expenditures
 - 67% Percentage of institutions with less than 75% centralization of IT staff
 - * Distributed IT FTEs per 1,000 institutional FTEs at institutions with less than 75% centralization of IT staff
 - 51% Distributed IT staff FTEs as a percentage of total institutional IT staff FTEs at institutions with less than 75% centralization of IT staff

EDUCATIONAL TECHNOLOGY SERVICES

- 35 Student FTEs per lab/cluster workstation provided by central IT
- 102 Student FTEs per virtual lab/cluster workstation provided by central IT
- 912 Student FTEs per kiosk workstation provided by central IT
- 358 Student FTEs per laptop/tablet provided by central IT for checkout or loan
- 96% Institutions with collaborative spaces
- 87% Institutions with team-based classrooms
- 49% Institutions with makerspaces

Most common teaching and learning support services:

- Classroom technology and support for faculty (100%)
- Faculty individual training in use of educational technology (100%)
- Learning management training and support for faculty (100%)
- Technology-enhanced spaces (100%)

Most commonly achieved e-learning practices:

- E-learning technology delivery systems considered mission critical (93%)
- Highly reliable e-learning technology delivery systems (91%)
- Most e-learning technology services supported through a centralized system (88%)

Most commonly deployed e-learning technologies:

- Full-function online learning delivery system (97%)
- Real-time web- or videoconferencing online learning environment (95%)
- Student evaluation of teaching effectiveness (94%)

Most commonly deployed student success technologies:

- Degree audit (95%)
- Credit transfer/articulation system (83%)
- Advising center management (75%)

Classroom technologies most likely to be deployed soon:

- Wireless projection (37%)
- Remote monitoring for technical support (14%)
- Interactive monitoring (e.g., SMART Podiums) (13%)

INFORMATION SECURITY

- 63% Percentage of institutions with a dedicated person whose primary responsibility is information security
- 85% Institutions that have conducted any sort of IT security risk assessment
- 32% Institutions that have conducted an IT security risk assessment of cloud service or thirdparty providers

Most commonly achieved information security practices:

- Acceptable use policy defining the misuse of institutional IT resources and data (92%)
- Relationships with local law enforcement authorities (90%)
- Individual with institution-wide information security responsibility and authority written in their job description (89%)
- Participation in local or national security groups (89%)

Most commonly deployed information security systems and technologies:

- Malware protection (96%)
- Secure remote access (95%)
- Secure wireless access (93%)

91% Institutions that are members of an authentication federation (e.g., InCommon)

78% Institutions using multifactor authentication

INFORMATION SYSTEMS AND APPLICATIONS

Systems most commonly vendor managed (SaaS):

- E-mail: student (70%)
- E-mail: faculty/staff (44%)
- Learning management (44%)

Systems most likely to be replaced in the next three years:

- Customer relationship management (CRM) (31%)
- Human resources information (28%)
- Advancement/fundraising (22%)

Systems most commonly mobile friendly:

- E-mail: student (64%)
- E-mail: faculty/staff (63%)
- · Learning management (58%))

^{*} Sample size of fewer than 15 institutions